REMARKS

Claims 1-2, 4, 6-10, 12, 14-18, and 20-23 remain pending in the application.

35 U.S.C. § 103 Rejections

In the present Office Actions, claims 1, 2, 4, 6-10, 12, 14-18, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Midgley et al, (U.S. Patent No. 6,625,623 hereinafter "Midgley") in view of Rubin et al. (U.S. Patent No. 5,680,573 hereinafter "Rubin"). In addition, claims 21-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Midgley in view of Rubin as applied to claims 1, 9, and 17 and further in view of Mashayekhi et al. (U.S. Patent No. 6,922,791 hereinafter "Mashayekhi"). Applicant respectfully traverses the above rejections and requests reconsideration.

In paragraph 11 of the present Office Action, the Examiner responds to Applicant's arguments filed 10/2/2006, suggesting that the essence of Applicant's argument is that "Midgley fails to teach the limitations of the application, the first storage device, and replicator are not within a node in the system." Further, in paragraph 12, the Examiner suggests that Applicant is trying to argue, "the claimed node is a single device on a network." Applicant submits that these are characterizations of Applicant's arguments are not accurate. In fact, on pages 6 and 7 of the response filed 10/2/2006, Applicant argued that "the agent 30, server (18, 20, 22), and database (32, 34, 38) are not within the network client 28". Applicant concedes that a node may include more than a single device. However, even if Midgley's "items 24, 28, servers 18, 20, and 22 and storage devices 32, 34, 38 are all within a local node," as suggested by the Examiner in paragraph 12, Applicant submits that Midgley fails to teach a node that includes the recited "said application, first storage device, <u>and replicator</u>," emphasis added.

Regarding claim 1, in paragraph 3 of the present Office Action, the Examiner asserts that Midgley teaches

"a replicator component (see lines 10-52 of column 19) configured to monitor said write transactions (see lines 10-52 of column 19); and automatically modify system resources in response to I/O characteristics of said monitored write transactions …"

However, the cited portion of Midgley merely discloses the operation of a bandwidth control process 44. More specifically, Midgley discloses:

"Turning again to FIG. 1, the systems and methods described herein may transfer data from thousands of files during a synchronization operation. Such an operation may consume substantial amounts of the available network resources, such as network bandwidth and buffer capacity. In practice, the system 10 of FIG. 1 will use by default as much available network bandwidth as it needs to back up or restore data. However, in one optional embodiment, the system 10 allows a user to specify the maximum amount of network bandwidth that it may consume when backing up or restoring data. For example, the user may choose to set a network consumption limit in certain applications, such as if the user is backing up data across a WAN, or the Internet or if bandwidth availability is limited during certain times.

To this end, the back up server 12 may provide a bandwidth control process 44 that may be accessed through the console 24. In the depicted embodiment, the bandwidth control process is shown as operating on the back up server 12, however it will be apparent to those of skill in the art that the bandwidth control process 44 may be located on the data servers 18, 20, 22, or on both the data servers 18, 20, 22 and the back up server 12. The user may employ this process 44 to set a network consumption limit for each backup policy and restore operation. When setting this option, the user may select the bandwidth that is available between the source and backup systems, and specify a consumption limit to be allocated to the synchronization and/or dynamic replication processes. If multiple network links are available between the systems, the user may specify the slowest link. Further, the bandwidth control process 44 may include a process for determining, either dynamically, or historically, the available network resources, including network bandwidth and buffer availability, for a given time. The determined resources may be provided by the user through the console process 24, or automatically employed by the bandwidth control process 44 for selecting network consumption limits. The design and development of such a process for determining available network resources follows from principles well known in the art, including those set forth in U.S. Pat. No. 5,920,701, Scheduling data

transmission, by Miller, C. Kenneth et al., the teachings of which are herein incorporated by reference.

Once the consumption limit is set, the bandwidth control process 44 may throttle the bandwidth usage of the agents 30, synchronization replication process 40 or any replication process by limiting the amount of data to be placed on the network 10 per unit of time. To this end, the bandwidth control process 44 may calculate the bandwidth usage limit based on the maximum percentage of bandwidth the user selected for the operation and the type of network specified. Optionally, the user may vary the network bandwidth consumption for a particular policy over the course of a week. Thus a user could choose to limit consumption during the working hours and allow unlimited consumption at other times." (Midgley, column 19, lines 10-60)

As may be seen from the above, bandwidth control process 44 may be used to throttle bandwidth usage based on user selections. However, Applicant finds no teaching or suggestion that bandwidth control process 44 is configured to "monitor said write transactions; allocate buffers from said memory pool for said write transactions; and automatically modify system resources in response to I/O characteristics of said monitored write transactions," as recited in claim 1. Instead, bandwidth control process 44 sets bandwidth limits according to user inputs, not in response to monitoring. For at least these reasons, Applicant submits that bandwidth control process 44 is not equivalent to the recited replicator.

Further, bandwidth control process 44 does not perform the function of replication. More particularly, the bandwidth control process 44 is not "configured to convey said write transactions to said second node," as recited in claim 1. Instead, Midgley teaches a different component that performs replication located not on the data servers or clients, but on a backup server, namely, a "synchronization replication process 40." After a careful reading of Midgley in its entirety, Applicant finds no teaching or suggestion of placing the synchronization replication process 40 anywhere but on the backup server, despite the contrary assertion by the Examiner in paragraph 12 of the present office action that "Midgely further discloses the replicator can be within any of the servers 18-22." Thus, Applicant finds no teaching or suggestion in Midgely that

"said application, first storage device, and replicator are within a first node of said system" as is recited in claim 1.

In addition, Midgely's synchronization replication process 40 is not configured to "monitor said write transactions; allocate buffers from said memory pool for said write transactions; and automatically modify system resources in response to I/O characteristics of said monitored write transactions." Instead, process 40 performs replication at times selected by the user, such as during a scheduled backup operation.

Accordingly, Applicant submits not all of the features of claim 1 are disclosed by the combination of cited art, and claim 1 is patentably distinct for at least the above reasons. As each of independent claims 9 and 17 include features similar to that of claim 1, each of these claims are patentably distinct for similar reasons.

In view of the above, Applicant respectfully requests withdrawal of the rejections.

Applicant believes the application to be in condition for allowance. However, should the examiner believe issues remain, the below signed representative would appreciate and requests a phone interview (512-853-8866) to facilitate a speedy resolution.

CONCLUSION

Applicant submits the application is in condition for allowance, and notice to that effect is respectfully requested.

If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above-referenced application from becoming abandoned, Applicant(s) hereby petition for such an extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5760-12100/RDR.

Respectfully submitted,

/ Rory D. Rankin /
Rory D. Rankin
Reg. No. 47,884
ATTORNEY FOR APPLICANT(S)

Meyertons, Hood, Kivlin,
   Kowert, & Goetzel, P.C.
P.O. Box 398
Austin, TX 78767-0398
Phone: (512) 853-8800

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